ORIGINAL

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	RM-8143
	)	
	)	

To: The Commission

REPLY COMMENTS OF TRW INC.

TRW Inc. ("TRW"), by its attorneys and pursuant to Sections 1.415 and 1.419 of the Commission's Rules, hereby replies to initial comments concerning the above-captioned Notice of Proposed Rule Making, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, 9 FCC Rcd 6170 (1994). TRW responds herein to those commenters suggesting that mobile-satellite service ("MSS") systems should be required to adopt enhanced 9-1-1 ("E-911") protocols equivalent to those used by terrestrial wireless services.

In its own initial comments, TRW demonstrated that such a step would be neither practical nor reasonable, in part because, as the Commission recognized in the NPRM, the "provision of emergency services is essentially local in nature,"[1/] and MSS systems will very likely provide most services over long distances, or within

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1/ NPRM, 9 FCC Rcd at 6180 (¶ 57).

and between foreign countries.[2/] For these reasons, TRW urged the Commission not to impose E-911 requirements on MSS capacity providers or CMRS providers offering MSS capacity, unless they also provide local CMRS services. It called upon the Commission to mandate E-911 service only for terrestrial CMRS providers that provide local communications services. Other entities that are familiar with the satellite industry unanimously agreed with TRW that application of E-911 requirements to MSS would be counterproductive.[3/]

A few commenters, however, have ignored the characteristics and realities of providing MSS, and have instead made a blunderbuss proposal that would result in E-911 being mandated for the service.[4/] No reasoning is supplied as to why, or how, E-911 can be applied to MSS in a manner that is safe, useful, and not unreasonably costly. These commenters apparently have little or no knowledge of either the costs or technical complexities involved in extending automatic location and routing protocols to MSS or, at least, have not given these issues due consideration.

2/ See also Comments of the Texas Advisory Commission on State Emergency Communications at 13 ("9-1-1 emergency service is a local service").

3/ See Comments of Motorola, Inc. ("Motorola") at 9; Comments of AMSC Subsidiary Corp. ("AMSC") at 7; Comments of IDB Mobile Communications, Inc. at 3; Comments of COMSAT Corporation at 8; Comments of Constellation Communications, Inc. ("Constellation") at 2. See also Comments of STARSYS Global Positioning, Inc. at 2 (regarding the NVNG MSS).

4/ See Comments of the United States Coast Guard at 10; Comments of the Interagency Committee on Search and Rescue ("ICSAR") at 4. See also Comments of the California Public Utilities Commission at 4 (generally including satellite systems in a call for mandatory performance requirements).

Instead, they have become unduly absorbed in the notion that MSS systems will be able easily to provide the same sort of location information as land-based systems.[5/] This is simply not the case with currently planned and available technology.

Indeed, to illustrate this point, even ICSAR, the most ardent of the few supporters of E-911 requirements for MSS, observes that identification of an appropriate responding Public Service Answering Point ("PSAP") would be "a major challenge" in using E-911 with MSS systems. It then goes on to identify what it calls "a fundamental difficulty not present in wired or terrestrial wireless systems" that is present for MSS -- the fact that users will not be within a fixed radius of a receiving station, but will be communicating via satellites and a limited number of terrestrial gateway ground stations from virtually anywhere on the face of the earth.[6/] Despite this recognition of the problem, however, ICSAR also assumes that it will be technically and economically feasible to use MSS technology to establish pinpoint locations of users in distress, to identify the appropriate PSAP in that area, and to route such calls immediately to a correctly identified PSAP. ICSAR nonetheless admits that it has no basis upon which even to estimate the actual costs of implementing such technology, and no particular assistance to provide in determining

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5/ See, e.g., Comments of the Interagency Committee on Search and Rescue at 4.

6/ See TRW Comments at 3-5.

how to establish the "national database of PSAPs and RCCs, with clearly defined geographic areas of responsibility" that it recommends.[7/]

In short, no case has been made that would justify subjecting MSS to E-911 requirements. Indeed, parties that have previously advocated including MSS within the services covered by E-911 have not addressed the issue in this proceeding.[8/]

Significantly, declining to impose such requirements will not leave MSS users without direct access to emergency dispatch services. First, MSS systems will be able to offer standard 911 services, i.e., those without automatic position location and call routing, that will be able to take information from callers in distress.[9/] Second, makers of handsets for Odyssey™ (and for other MSS systems, as well) will typically include a dual-mode feature permitting users to access local cellular or PCS systems, permitting access to terrestrial E-911 services where they are available.[10/] MSS users should therefore be able to access 911 service without the need to impose technical requirements directly upon MSS systems.

7/ See ICSAR Comments at 4 & 6.

8/ See Comments of the Texas Advisory Commission on State Emergency Communications ("TX-ASEC"). Compare Comments of TX-ASEC in CC Docket No. 92-166, filed May 5, 1994.

9/ ICSAR acknowledges that this would be an appropriate accommodation "in the case of MSS systems that do not provide location information with the call." ICSAR Comments at 7.

10/ See AMSC Comments at 3.

On the other hand, if such requirements were imposed, the cost of adapting MSS systems themselves to provide E-911 functions would be unduly high,[11/] and would very likely retard the growth of these systems -- all without providing any corresponding public benefit.[12/] For this reason, the most reasonable course for the Commission is to permit service providers, to the extent possible, to offer E-911 as an enhancement to basic service, allowing market forces to determine whether and how such capability might be implemented in satellite systems in the future.[13/]

CONCLUSION

On the basis of the foregoing discussion and TRW's initial comments in this proceeding, TRW urges the Commission not extend mandated E-911 compatibility beyond local calling networks operated by terrestrial CMRS providers. The Commission should not impose special 911 requirements on MSS satellite systems or

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11/ See AMSC Comments at 7; Constellation Comments at 2; Westinghouse Comments at 8.

12/ See Motorola Comments at 8; Constellation Comments at 2.

13/ See Westinghouse Comments at 4.

on CMRS providers that utilize space segment capacity on these systems, unless such CMRS providers also provide local CMRS services such as PCS or cellular radio.

Respectfully submitted,

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